Child and Adolescent Oral Health Issues

"A silent epidemic of oral diseases is affecting our most vulnerable citizens—children from families with low incomes, children from racial and ethnic minority groups, and children with special health care needs. No child should suffer the stigma of craniofacial birth defects nor be found unable to concentrate because of the pain of untreated oral infections." 1

—Richard H. Carmona, M.D., M.P.H., F.A.C.S., U.S. Surgeon General



Access to Care

The need for oral health care is the most prevalent unmet health care need among children and adolescents.²

Children and adolescents without health insurance are four times more likely than those with private health insurance to have unmet oral health care needs (20 percent vs. 5 percent, respectively).³

Hispanic children and adolescents are almost twice as likely as non-Hispanic whitechildren and adolescents to have had no contact with an oral health professional in the past 2 or moreyears.³

Children and Adolescents with Special Health Care Needs

The need for oral health care is the most prevalent unmet health care need among children and adolescents with special health care needs, just as it is for all children and adolescents.⁴

More than half of U.S. dental schools provide students with less than 5 hours of classroom instruction and less than 5 percent of clinical time devoted to this population.⁵

Hands-on educational experiences in dental school significantly impact dentists' perception of barriers to care for children and adolescents with special health care needs.⁶

Dental Caries



Among children ages 2 through 5 from families with incomes at or below the federal poverty level, the amount of dental caries in the primary teeth remained unchanged from the early 1970s to the early 1990s.⁷

Although more than 90 percent of general dentists provide care to children and adolescents, very few provide care to children under age 4, children and adolescents with high levels of dental caries, and children and adolescents covered by Medicaid.⁸

Among children and adolescents from families with low incomes, nearly 80 percent of decayed primary teeth have not been restored in children ages 2 through 5, and almost 50 percent of decayed primary and permanent teeth have not been restored in children and adolescents ages 6 through 14.9

Dental Sealants

Pit and fissure dental sealants are effective in the primary prevention of dental caries, and they remain effective over time as long as they are maintained. ¹⁰

Only 12 percent of children and adolescents (ages 6 through 14) living at or below the federal poverty level have at least one dental sealant—roughly one-third of the percentage of children and adolescents in families with higher incomes.¹¹

Direct delivery of dental sealants to children and adolescents in school-based or school-linked settings reduces dental caries among children and adolescents by 60 percent. 12



Fluorides

Water remains the most equitable and cost-effective method of delivering fluoride to community members, regardless of their age, educational attainment, or income level.¹³

Community water fluoridation decreases tooth decay by 29 to 51 percent in children and adolescents (ages 4 through 17).¹²

Other fluoride-containing products such as fluoride drops and tablets may be important in communities where water is not fluoridated.¹⁴



Injury and Violence

By age 16, 35 percent of children and adolescents will have sustained dental trauma at least once. 15

Head, face, and neck injuries occur in more than half of the cases of child abuse. ¹⁶ Health professionals are in a unique position to recognize child abuse and neglect.

Used during sports, mouth guards offer a substantial degree of protection to the teeth and oral soft tissues and also protect children and adolescents from concussion.¹⁷

Tobacco

The association between tobacco use and oral diseases has been clearly delineated in every Surgeon General's report on tobacco since 1964. Accumulating evidence shows that maternal tobacco use is associated with congenital disabilities such as cleft palate and cleft lips. ¹⁸

Although the prevalence of tobacco use among students in grades 9 through 12 has decreased since 1999, 28 percent of students in this age group currently use some form of tobacco products (e.g., cigarettes, spit tobacco, cigars). Within this age group, 15 percent of non-Hispanic black students, 18 percent of Hispanic students, and 25 percent of non-Hispanic white students smoke cigarettes.¹⁹

References

- National Institute of Dental and Craniofacial Research. 2003. A National Call to Action to Promote Oral Health: A Public-Private Partnership Under the Leadership of the Office of the Surgeon General. Rockville, MD: National Institute of Dental and Craniofacial Research.
- Newacheck PW, Hughes DC, Hung Y, Wong S, Stoddard JJ. 2000. The unmet health needs of America's children. *Pediatrics* 105(4):989–997.
- Bloom B, Cohen RA, Vickerie JL, Wondimu EA. 2003. Summary of health statistics for U.S. children: National Health Interview Survey, 2001. Vital and Health Statistics 10(216):1–62.
- Newacheck PW, McManus M, Fox HB, Hung YY, Halfon N. 2000. Access to health care for children with special health care needs. *Pediatrics* 105(4):760–766.
- Romer M, Dougherty N, Amores-Lafleur E. 1999. Predoctoral education in special care dentistry: Paving the way to better access? *Journal of Dentistry for Children* 66(2):132–135.
- Casamassimo PS, Seale S, Ruehns K. 2004. General dentists' perceptions of educational and treatment issues affecting access to care for children with special health care needs. *Journal of Dental Education* 68(1):23–28.
- Brown LJ, Wall TP, Lazar V. 2000. Trends in total caries experience: Permanent and primary teeth. *Journal of the* American Dental Association 131(2):223–231.

- Seale NS, Casamassimo PS. 2003. Access to dental care for children in the United States: A survey of general practitioners. *Journal of the American Dental Association* 134(12):1630–1640.
- Vargas CM, Crall JJ, Schneider DA. 1998. Sociodemographic distribution of pediatric dental caries: NHANES III, 1988–1994. Journal of the American Dental Association 129(9):1229–1238.
- National Institute of Dental and Craniofacial Research. 2001. National Institutes of Health Consensus Development Conference statement: Diagnosis and management of dental caries throughout life, March 26–28, 2001. Bethesda, MD: National Institute of Dental and Craniofacial Research.
- U.S. General Accounting Office. 2000. Oral Health: Dental Disease is a Chronic Problem Among Low-Income Populations. Washington, DC: U.S. General Accounting Office.
- Task Force on Community Preventive Services. 2002. Guide to Community Preventive Services: Oral Health. Atlanta, GA: Community Guide Branch, Centers for Disease Control and Prevention.
- Centers for Disease Control and Prevention. 1999.
 Achievements in public health, 1900–1999: Fluoridation of drinking water to prevent dental caries. Morbidity and Mortality Weekly Report 48(41):933–940.

- Bader JD, Rozier RG, Lohr KN, Frame PS. 2004. Physicians' roles in preventing dental caries in preschool children: A summary of the evidence for the U.S. Preventive Services Task Force. American Journal of Preventive Medicine 26(4):315–325.
- Slavkin HC. 2000. Compassion, communication and craniofacial orodental trauma: Opportunities abound. Journal of the American Dental Association 131(4):507– 510
- American Academy of Pediatrics, Committee on Child Abuse and Neglect, and American Academy of Pediatric Dentistry, Ad Hoc Work Group on Child Abuse and Neglect. 1999. Oral and dental aspects of child abuse and neglect. Pediatrics 104(2, Part 1):348–350.
- Sullivan, JA, Anderson SJ, eds. 2000. Care of the Young Atblete. Rosemont, IL: American Academy of Pediatrics and American Academy of Orthopaedic Surgeons.
- Little J, Cardy A, Munger RG. 2004. Tobacco smoking and oral clefts: A meta-analysis. Bulletin of the World Health Organization 82(30):213–218.
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2003 National Youth Risk Behavior Survey. Cited in Data2010... the Healthy People 2010 Database—July 2004 edition [Web site] on September 2, 2004; available at http://wonder.cdc.gov/data2010.

This fact sheet was produced by the National Maternal and Child Oral Health Resource Center supported under its grant (H47MC00048) from the Maternal and Child Health Bureau, Health Resources and Services Administration

Child and Adolescent Oral Health Issues © 2004 by the National Maternal and Child Oral Health Resource Center, Georgetown University.

Permissionis given to photocopy this fact sheet. Requests for permission to use all or part of the information contained in this publication in other ways should be sent to the National Maternal and Child Oral Health Resource Center. National Maternal and Child Oral Health Resource Center Georgetown University Box 571272 Washington, DC 20057-1272 (202) 784-9771 • (202) 784-9777 fax E-mail: info@mchoralhealth.org Web site: www.mchoralhealth.org